

# DIGITAL GOVERNMENT

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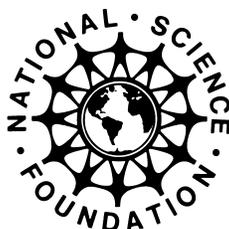
## *Program Announcement* *NSF 99-103*

DIRECTORATE FOR COMPUTER AND INFORMATION  
SCIENCE AND ENGINEERING  
DIVISION OF EXPERIMENTAL AND INTEGRATIVE ACTIVITIES

***DEADLINE DATE: JULY 15, 1999***  
***AND SECOND WEDNESDAY IN JULY IN***  
***SUBSEQUENT YEARS***



NATIONAL SCIENCE FOUNDATION



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- ☐ **Location:** 4201 Wilson Blvd.  
Arlington, VA 22230
  
- ☐ **For General Information (NSF Information Center):** (703) 306-1234
  
- ☐ **TDD (for the hearing-impaired):** (703) 306-0090
  
- ☐ **To Order Publications or Forms:**
  - Send an e-mail to: [pubs@nsf.gov](mailto:pubs@nsf.gov)
  - or telephone: (301) 947-2722
  
- ☐ **To Locate NSF Employees:** (703) 306-1234

# SUMMARY OF PROGRAM REQUIREMENTS

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## GENERAL INFORMATION

**Program Name:** Digital Government

### **Short Description/Synopsis of Program:**

Government at all levels is a major collector and provider of data and user of information technologies. The goal of the Digital Government Program is to fund research at the intersection of the computer and information sciences research communities and the mid- to long-term research, development, and experimental deployment needs of government information service communities. Academic/government collaborations are expected to contribute to government strategic planning for information services while providing interesting and unique new research problems and data sets for the academic research community.

**Cognizant Program Officer(s):** Lawrence E. Brandt, Program Officer, Room 1160, Division of Experimental and Integrative Activities, telephone 703. 306.1980, e-mail: lbrandt@nsf.gov.

**Applicable Catalog of Federal Domestic Assistance (CFDA) No.:** 47.070

## ELIGIBILITY

- ◆ Limitation on the categories of organizations that are eligible to submit proposals: **None**
- ◆ PI eligibility limitations: **None**
- ◆ Limitation on the number of proposals that may be submitted by an organization: **None**

## AWARD INFORMATION

- ◆ Type of award anticipated: **Standard Grant**
- ◆ Number of awards anticipated per year: **10-20 awards**
- ◆ Amount of funds available: **Approximately \$3 million will be available for this initiative in FY 2000**
- ◆ Anticipated date of award: **January 2000 and each year thereafter**

## PROPOSAL PREPARATION & SUBMISSION INSTRUCTIONS

- ◆ **Proposal Preparation Instructions**
  - Letter of Intent requirements: To assist the Program in planning for merit review of proposals, potential proposers are requested, but not required, to send a short (paragraph or two) description of the essential elements of their proposal, including major partners, by email to dgpd@nsf.gov, approximately three weeks before the proposal due date. A notice of intent to propose does not bind the submitter in any way, nor is the submission of a notice required to submit a proposal. Notices of intent will not be reviewed for merit, but will be used to help plan the review.
  - Preproposal requirements: **None**

- Proposal preparation instructions: **Standard NSF Grant Proposal Guide instructions**
- Supplemental proposal preparation instructions: **None**
- Deviations from standard (GPG) proposal preparation instructions: **None**

◆ **Budgetary Information**

- Cost sharing/matching requirements: **None required.**
- Indirect cost (F&A) limitations: **None**
- Other budgetary limitations: **Award amounts up to \$1M/year for proposals submitted in response to this announcement**

◆ **FastLane Requirements**

- FastLane proposal preparation requirements: **FastLane use required**
- FastLane point of contact: **Helen Walston, Support Manager, telephone: 703. 306.1980, e-mail: hwalston@nsf.gov**

◆ **Deadline/Target Dates**

- Full Proposal Deadline: 5:00 PM, your local time, July 15, 1999. Second Wednesday of July in subsequent years.

## **PROPOSAL REVIEW INFORMATION**

- ◆ Merit Review Criteria: Standard National Science Board approved criteria and supplementary criteria as indicated below

## **AWARD ADMINISTRATION INFORMATION**

- ◆ Grant Award Conditions: **GC-1 or FDP III**
- ◆ Special grant conditions anticipated: **None anticipated**
- ◆ Special reporting requirements anticipated: **None**

## **INTRODUCTION**

The Computer and Information Science and Engineering Directorate (CISE) of the National Science Foundation (NSF) announces a multi-sector research program on Federal Information Services. The focus is on partnerships between the academic research community normally supported by CISE grants and government agencies with significant information service components in their missions. The intent is to support collaborative academic/government projects which will inform government strategic planning while provide interesting new data, problems and research opportunities for the research community.

## **PROGRAM DESCRIPTION**

Government is a major user of information technologies, a collector and maintainer of very large data sets, and a provider of critical and often unique information services to individuals, states, businesses, and other customers. The goal of the Digital Government Program is to fund research at the intersection of the computer and information sciences research communities and the mid- to long-term research, development, and experimental deployment needs of government information service communities. The Internet, which was created from a successful partnership between government agencies and the information technologies research community, is a major motivating factor and context for this program.

The coming decade will see the potential for nearly ubiquitous access to government information services by citizen/customers using highly capable digital information/entertainment appliances. Given the inexorable progress toward faster computer microprocessors, greater network bandwidth, and expanded storage and computing power at the desktop, citizens will expect a government that responds quickly and accurately while ensuring the privacy rights of individuals and the integrity of provided information. Enhancements derived from new information technology-based services are expected to contribute to reinvented efficient, and economical government services, and more productive government employees. As society relies more and more on network technologies, it is essential that government make the most effective use of these improvements.

There is an immediate opportunity for the broad connection of information services providers and research communities, in an arena drawing heavily on the challenging and unique requirements of the government sector, to speed innovation and development, deployment, and application of more advanced technologies into usable systems. By supporting mid- to long-term research, development, and experimental deployment, fundamental limitations encountered in applying information technology to the government information services domain can begin to be addressed. Research that considers real world operating constraints can provide valuable new problems and insights for the academic research domain, while demonstrating pilot systems with new capabilities for government agencies. Such research can contribute to a long-term transition strategy for migrating government information services from legacy systems, through interoperable systems of the Internet, and toward advanced integrated global systems.

Within this context, the objective of the Digital Government Program is to support innovative projects that effectively and broadly address through research the potential improvement of agency, interagency, and intergovernmental operations and/or government/citizen interaction. Such research is expected to enable the generation and use of a continuous stream of advanced information technologies for early adoption and integration into the government information systems community.

## **POTENTIAL RESEARCH TOPICAL AREAS AND TECHNOLOGIES**

### **EXAMPLES**

Examples of project areas are listed below to suggest the types of activities envisioned for this Program. *Although two sample domains are used in some examples (i.e., government statistics and emergency management), these are illustrative and do not imply any priority for them.*

#### **I. Intelligent Information Integration**

This topic includes techniques to define, design and maintain shared ontologies, or the means of mediating queries among multiple distributed data and information sources which may contain heterogeneous or incongruent data. Also included are collaboration tools for network based information systems to allow widely distributed groups of citizens or government personnel to collaborate and interact remotely to achieve common goals; adaptive planning environments. Examples are:

- Automated "content" searching to generate indices, with formal ontologies of available government statistical data and their meaning, and access methods.
- Automated formal processes assisting and guiding emergency managers to locate, access and effectively use available data and information resources.
- Systems which support integration of data and interoperability among government agencies, including Federal, state, local, and/or tribal government entities

## **II. Very large scale data and information acquisition and management for geospatial and multidimensional data**

Technologies to cost-effectively acquire, integrate, view and assure the integrity of geographic, biological, environmental, social, and economic data and meta-data of all types. Examples are:

- "Uniform" access to linked statistical data sources in the 70+ agencies that gather statistics and disseminate this information across multiple sectors;
- A master USA data source index for rapid culling together of data for emergency managers dealing with crises and critical emergencies in the field;
- Use of digital signature technology by the creating organization, to provide assurance of data authenticity and integrity as the data are collected and/or accessed by outside parties.

## **III. Advanced analytics for large datasets/information collections**

Infrastructure to allow the broadest range of analysis techniques to be applied to user selected views and visualization of very large data and information sources. Examples are:

- Data mining facilities and computing utility services for citizens to compute models of online statistical data sources;
- Information-on-demand services for emergency management which present only the information needed to avoid information overload.

## **IV. Electronic transaction and electronic commerce technologies**

Common transaction media between government and the citizenry; successful migration strategies from batch-oriented transactions to scaleable and efficient on-line systems; data integrity and authentication mechanisms to maintain the highest levels of privacy and data integrity. Examples are:

- Electronic Service Delivery via WWW and distributed kiosks at public sites, any-time processing allowing citizens to process benefits inquiries and requests electronically.
- Demonstrations of new security capabilities based upon novel means of detecting fraud or unauthorized access and use of information.
- Use of public key technology to authenticate parties to a transaction, and ensure the integrity and confidentiality of data transacted, especially between different public key infrastructures (or domains) using different models for ensuring the validity of public key certificates.

## **V. Information services for citizen/customers**

Human computer interactions (e.g., human-centered factors), visualization and presentation technologies to accommodate the widest range of interaction environments and modalities, multimedia objects, tools sets and user's needs and requirements. Examples are:

- Kiosk-based access for multiple service delivery;
- A Computing Services Utility allowing the citizenry remote access to data and computational resources and enabling its processing from publicly available computing appliances.
- Universal access

## **VI. Research in the Application of Information Technology to Law and Regulation**

The application of R&D in information technology to the implementation of law, policy and regulation, such as:

- Archiving, record keeping, and preservation
- Authentication of documents including the use of digital signatures for that purpose
- Privacy, e.g., reliable identification of individuals to ensure only authorized access to private information, journaling of access and access control
- Systems to support the regulatory process, e.g. collection and synthesis of public commentary

Relevant laws and regulations might include, but are not limited to: Computer Security Act of 1987, Copyright Act of 1976, Federal Records Act, National Archives and Records Administration Regulations, Freedom of Information Act, Information Technology Management Reform Act of 1996, Paperwork Reduction Act of 1995, Privacy Act, Americans with Disabilities Act of 1990 and the Rehabilitation Act Amendments of 1992.

## **VII. Software Engineering of Large-Scale Government Development Projects**

Many government agencies develop and use large software systems for diverse aims, e.g.:

- NASA launch monitoring and control systems
- Bureau of the Census integrated information systems and services
- Social Security Administration databases and financial management
- Federal Aviation Administration air traffic control systems
- legal record search and retrieval systems for the judicial branch

These development projects may be more open to the participation of software and systems researchers than similar large commercial projects. The barriers of proprietary products and competitive advantage are often less acute in these government projects, allowing the collection, analysis, and reporting of data about software development and the judicious experimental use of new technologies and methodologies. Research could focus on the improvement of ongoing process and product or the observation and analysis of software development. Projects can be designed to meet agency goals and needs while providing the setting for significant empirical software research.

## **VIII. Examples of other cross-agency topical and technical areas and related activities**

Digital government projects may relate to a variety of NSF activities such as those listed below. Further information on CISE program areas dealing with these may be found at <http://www.cise.nsf.gov>

- Partnerships for Advanced Computational Infrastructure
- High-speed Networking Access and Applications
- Computation and Social Systems
- Human Computer Interaction
- Knowledge and Cognitive Systems
- Software Engineering
- Information and Data Management
- Educational Innovation
- Knowledge and Distributed Intelligence

On-line information on NSF programs in general may be found at <http://www.nsf.gov>

Examples of other cross-agency domain areas include:

- Electronic grant administration
- Financial systems (e.g. real-time intrusion alerts, data-mining for patterns of abuse, access journaling)
- Geographic Information Systems (knowledge discover algorithms over large, time-varying spatial data sets, representation of degree of data reliability)
- Next Generation Internet applications (e.g., large file transfer, quality of service, bandwidth reservation, synchronous service)
- On-line intelligent learning and training
- Procurement
- Public health
- Interoperable networks and architectures
- Security, privacy and information assurance
- Summarization and semantic analysis of public comment (e.g. issuance of regulations, the Federal Advisory Committee Act process, commentary through the Federal Register)
- Virtual government agencies (cross-organization collaboration, sharing of information, distributed databases)
- Criminal justice, public safety, and law enforcement
- Network and systems architectures which overarch and knit together government agencies at all levels

## CONTEXT

The context of Digital Government research can be obtained from the following reports [Web references for other related reports can be found at <http://nii.nist.gov/pubs/pubs.html>]:

- “Toward a Digital Government in the 21st Century”, supported by the National Science Foundation, the Federal Information Services and Applications Council of the National Science and Technology Council, and the National Center for Research Resources of the National Institutes of Health (<http://www.isi.edu/nsf/>)
- Access America, a report from the President's Government Information Technology Services Board (<http://gits.gov>)
- Topical reports from the Computer Science and Telecommunications Board of the National Academy of Sciences (<http://www2.nas.edu/cstbweb/>)
- The Strategic Plan of the Federal Chief Information Officers Council (<http://www.cio.fed.gov/>)
- Report of the Presidential Commission on Critical Infrastructure Protection (<http://www.pccip.gov>)
- Report of the Presidential working group - “A Framework for Global Electronic Commerce” ([http://www.iitf.nist.gov/electronic\\_commerce.htm](http://www.iitf.nist.gov/electronic_commerce.htm))
- Enhancing Learning and Education Through Technology - A Presidential Memorandum for the Heads of Executive Departments and Agencies - (<http://www.pub.whitehouse.gov/WH/Publications/html/Publications.html>)
- Access with Trust, a report from the Federal Public Key Infrastructure Steering Committee (<http://gits-sec.treas.gov>)
- President's Information Technology Advisory Committee Report (<http://www.ccic.gov/ac/report/>)
- Executive Order 1378 – “Increasing Employment of Adults with Disabilities” (<http://www.pub.whitehouse.gov/white-house-publications/1998/08/>)

## AGENCY CONTACTS

The individuals listed at <http://www.cise.nsf.gov/eia/> (link to EIA Programs and then Digital Government) will act in an ombudsman capacity, and may be contacted for information and identification of potential agency participants. The listing of an agency or individual does not necessarily imply an agreement to participate as a partner in any proposals.

## ELIGIBILITY

At least one government agency must be a significant partner in the definition and execution of the proposed work. Participation by other sectors (vendors, industry, private research laboratories, foundations) as appropriate, is encouraged. If the primary government partners are state, local, and/or tribal, then at least one Federal agency must endorse the proposal, to ensure that the work proposed furthers Federal Government program goals. Government agencies participating in proposals must be fully engaged in the development of the proposal and subsequent project activities. Agencies are encouraged to partner through sharing of facilities, data, and personnel, as well as either direct funding for researchers or joint funding with the National Science Foundation, for support of non-government project costs. *NSF funds may not be used to support costs incurred by other agencies directly related to carrying out their missions, such as staff, travel, and cost of facilities.* Inasmuch as NSF does not intend to supplement the budgets of other government agencies, NSF will support only the research elements of the work proposed. For the non-research parts of the project, other sources of support must be identified. Proposers are responsible for identifying and addressing in the proposal any constraints by law or regulation on the collection, creation, dissemination or disposition of data; in particular as related to their government partner agencies.

## AWARD INFORMATION

Under this announcement, NSF solicits proposals for any funding amount up to \$1.0 million per year for up to three years, and expects to make grants at a wide variety of award sizes and durations in the following categories. Category 3 proposals are limited to no more than \$30,000 for up to one year.

1. Standard NSF research projects
2. Domain-specific cross-agency pilot projects, testbeds, or centers
3. Planning grants - preparatory to proposals for pilot projects or testbeds, the program will support planning grants for up to one year. These are one-time awards that may be used for preliminary work to determine the feasibility of a proposed line of inquiry.
4. Human-development activities (e.g. sabbaticals for faculty at government agencies, student internships at agencies, assignments of government employees at universities or vendors)
5. Workshops and other community-building, technology exchange, or clearinghouse mechanisms related to digital government research topics

NSF expects to fund approximately 10 to 20 three year research awards depending on the quality of submissions and the availability of funds. In exceptional cases, awards for up to five years may be considered if the justification and promise are compelling. Approximately \$3 million will be available for this initiative in FY 2000. Anticipated date of awards: January 2000 and January of each year thereafter

## **REQUIRED PROJECT ELEMENTS**

For all proposals:

- A domain area that is primarily governmental in nature, or where government requirements are unique
- Integration of domain experts (users, customers) during the project life cycle

For cross agency pilot project, testbed or center proposals:

- Plans for a framework or architecture for the development of application program interfaces, software objects, software re-use, and modularization, to encourage sharing of functionality across projects.
- Plans for early and regular delivery of partial research products in accordance with a proposed set of milestones.
- Plans for evaluation, during the project and at its conclusion, by the proposer to determine the usefulness and usability of its research products.
- Upon project completion, plans to ensure capture of research results; e.g., involvement of potential commercial partners (systems integrators, software vendors), commitments by other organizations for continued funding, etc.

Other project elements might be included depending on the nature of the proposed work, such as privacy, authentication and security elements, user learning and help components, human-centered systems elements (e.g., user interfaces, visualization tools, user interaction metrics, usability testing), use of non-proprietary or platform-neutral technologies, ability to scale and integrate systems, Web-compatible interfaces, use of collaboration technologies, and integration of educational elements.

## **PROPOSAL PREPARATION & SUBMISSION INSTRUCTIONS**

### **A. Proposal Preparation Instructions.**

Proposals submitted in response to this program announcement should be prepared and submitted in accordance with the general guidelines contained in the *Grant Proposal Guide* (GPG), NSF 99-2. The complete text of the GPG (including electronic forms) is available electronically on the NSF Web site at: <<http://www.nsf.gov/>>. Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone 301.947.2722 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

Proposers are reminded to identify the program announcement number (nsf99-103) in the program announcement/solicitation block on the NSF Form 1207, "*Cover Sheet for Proposal to the National Science Foundation.*" Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.

## **B. Proposal Due Dates.**

For electronic submission of proposals, the proposal **MUST** be submitted by 5:00 PM, local time, July 15 1999, and by the second Wednesday of July in subsequent years. Copies of the signed proposal cover sheet must be submitted in accordance with the instructions identified below.

*Submission of Signed Cover Sheets.* For proposals submitted electronically via the NSF FastLane Project, the signed proposal Cover Sheet (NSF Form 1207) should be forwarded to the following address and received by NSF within one week after the proposal has been submitted electronically.

National Science Foundation  
Division of Experimental and Integrative Activities  
FastLane Cover Sheet  
4201 Wilson Blvd.  
Arlington, VA 22230

A proposal may not be processed until the complete proposal (including signed Cover Sheet) has been received by NSF.

## **C. FastLane Requirements.**

The NSF FastLane system is available for electronic preparation and submission of a proposal through the Web at the FastLane Web site at <<http://www.fastlane.nsf.gov>>. The Sponsored Research Office (SRO or equivalent) must provide a FastLane Personal Identification Number (PIN) to each Principal Investigator (PI) to gain access to the FastLane "Proposal Preparation" application. PIs that have not submitted a proposal to NSF in the past must contact their SRO to be added to the NSF PI database. This should be done as soon as the decision to prepare a proposal is made.

In order to use NSF FastLane to prepare and submit a proposal, the following are required:

Browser (must support multiple buttons and file upload)

- Netscape 3.0 or greater
- Microsoft Internet Explorer 4.1 or greater

PDF Reader (needed to view/print forms)

- Adobe Reader 3.0 or greater
- PDF Generator (needed to create project description)
- Adobe Acrobat 3.01 or greater
  - Aladdin Ghostscript 5.10 or greater

A list of registered institutions and the FastLane registration form are located on the FastLane Web page.

For paper submission of proposals, the delivery address **must clearly identify the NSF announcement or solicitation number** under which the proposal is being submitted.

## **PROPOSAL REVIEW INFORMATION**

### **A. Merit Review Criteria.**

Review of proposals submitted to NSF are solicited from peers with expertise in the substantive area of the proposed research or education project. These reviewers are selected by Program officers charged with the oversight of the review process. NSF invites the proposer to suggest at the time of submission, the names of appropriate or inappropriate reviewers. Care is taken to ensure that reviewers have no conflicts with the proposer. Special efforts

are made to recruit reviewers from non-academic institutions, minority serving institutions, adjacent disciplines to that principally addressed in the proposal, etc.

Proposals will be reviewed against the following general merit review criteria established by the National Science Board. Following each criterion are potential considerations that the reviewer may employ in the evaluation. These are suggestions and not all will apply to any given proposal. Each reviewer will be asked to address only those that are relevant to the proposal and for which he/she is qualified to make judgments.

### **What is the intellectual merit of the proposed activity?**

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of prior work.) To what extent does the proposed activity suggest and explore creative and original concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

### **What are the broader impacts of the proposed activity?**

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

The following additional evaluation criteria will be employed:

- Feasibility of proposed work
- Degree of government agency endorsement and commitment
- Potential for impact on government information services and facilitation of mission accomplishment
- Degree of in-kind leverage demonstrated by government project partners, including personnel, facilities, and involvement of associated but separately funded projects which will benefit the proposed work.

### **Integration of Research and Education**

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learner perspectives. PIs should address this issue in their proposal to provide reviewers with the information necessary to respond fully to both NSF merit review criteria. NSF staff will give it careful consideration in making funding decisions.

### **Integrating Diversity into NSF Program, Projects, and Activities**

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- are essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports. PIs should address this issue in their proposal to provide reviewers with the information necessary to respond fully to both NSF merit review criteria. NSF staff will give it careful consideration in making funding decisions.

### **B. Merit Review Process**

Most the proposals submitted to NSF are reviewed by mail review, panel review, or some combination of mail and panel review.

All proposals are carefully reviewed by at least three other persons outside NSF who are experts in the particular field represented by the proposal. Reviewers will be asked to formulate a recommendation to either support or decline each proposal. A program officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation. In most cases, proposers will be contacted by the program officer after his or her recommendation to award or decline funding has been approved by his or her supervisor, the division director. This informal notification is not a guarantee of an eventual award. NSF will be able to tell applicants whether their proposals have been declined or recommended for funding within six months for 95 percent of proposals in this category. The time interval begins on the proposal deadline or target date or from the date of receipt, if deadlines or target dates are not used by the program. The interval ends when the division director accepts the program officer's recommendation.

In all cases, after final programmatic approval has been obtained, award recommendations are then forwarded to the Division of Grants and Agreements for review of business, financial and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with an NSF program officer. A principal investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants Officer does so at its own risk.

## **AWARD ADMINISTRATION INFORMATION**

### **A. Notification of the Award.**

Notification of the award is made *to the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program Division administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator.

### **B. Grant Award Conditions.**

An NSF grant consists of: (1) the award letter, which includes any special provisions applicable to the grant and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable grant conditions, such as Grant General Conditions (NSF GC-1)\* or Federal Demonstration Partnership Phase III (FDP) Terms and Conditions.\* and (5) any NSF brochure, program guide, announcement, or other NSF issuance that may be incorporated by reference in the award letter. Electronic mail notification is the preferred way to transmit NSF grants to organizations that have electronic mail capabilities and have requested such notification from the Division of Grants and Agreements.

\* These documents may be accessed electronically on NSF's Web site at: <<http://www.nsf.gov/>>. Paper copies may be obtained from the NSF Publications Clearinghouse, telephone 301.947.2722 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

More comprehensive information on NSF Award Conditions is contained in the NSF *Grant Policy Manual* (GPM) Chapter II, (NSF 95-26) available electronically on the NSF Web site. The GPM also is available in paper copy by subscription from the Superintendent of Documents, Government Printing Office, Washington, DC 20402. The GPM may be ordered through the GPO Web site at: <<http://www.gpo.gov/>>.

### **C. Reporting Requirements.**

For all multi-year grants (including both standard and continuing grants), the PI must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period.

Within 90 days after expiration of a grant, the PI also is required to submit a final project report. Approximately 30 days before expiration, NSF will send a notice to remind the PI of the requirement to file the final project report.

Failure to provide final technical reports delays NSF review and processing of pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

NSF has implemented a new electronic project reporting system, available through FastLane, which permits electronic submission and updating of project reports, including information on: project participants (individual and organizational); activities and findings; publications; and, other specific products and contributions. Reports will continue to be required annually and after the expiration of the grant, but PIs will not need to re-enter information previously provided, either with the proposal or in earlier updates using the electronic system.

Effective October 1, 1998, PIs are required to use the new reporting format for annual and final project reports. PIs are strongly encouraged to submit reports electronically via FastLane. For those PIs who cannot access FastLane, paper copies of the new report formats may be obtained from the NSF Clearinghouse as specified above. NSF expects to require electronic submission of all annual and final project reports via FastLane beginning in October, 1999.

#### **D. New Awardee Information.**

If the submitting organization has never received an NSF award, it is recommended that the organization's appropriate administrative officials become familiar with the policies and procedures in the NSF *Grant Policy Manual* which are applicable to most NSF awards. The "Prospective New Awardee Guide" (NSF 97-100) includes information on: Administration and Management Information; Accounting System Requirements and Auditing Information; and Payments to Organizations with Awards. This information will assist an organization in preparing documents that NSF requires to conduct administrative and financial reviews of an organization. The guide also serves as a means of highlighting the accountability requirements associated with Federal awards. This document is available electronically on NSF's Web site at: <<http://www.nsf.gov/cgi-bin/getpub?nsf97100>>.

### **CONTACTS FOR ADDITIONAL INFORMATION**

General inquiries should be made to the **Digital Government Program**. Lawrence E. Brandt, Program Officer, Room 1160, Division of Experimental and Integrative Activities, National Science Foundation, Arlington, VA 22230, telephone 703. 306.1980, e-mail: [lbrandt@nsf.gov](mailto:lbrandt@nsf.gov). For questions related to use of FastLane, contact Helen Walston, Support Manager, 703.306.1980, e-mail: [hwalston@nsf.gov](mailto:hwalston@nsf.gov).

### **OTHER PROGRAMS OF INTEREST**

The NSF Guide to Programs is a compilation of funding opportunities for research and education in science, mathematics, and engineering. General descriptions of NSF programs, research areas, and eligibility information for proposal submission are provided in each chapter. Beginning in fiscal year 1999, the NSF Guide to Programs only will be available electronically. Many NSF programs offer announcements concerning specific proposal requirements. To obtain additional information about these requirements, contact the appropriate NSF program offices listed in Appendix A of the GPG.

Any changes in NSF's fiscal year programs occurring after press time for the Guide to Programs will be announced in the NSF E-Bulletin, available electronically on the NSF Web site at: <<http://www.nsf.gov/home/ebulletin/>>. The direct URL for recent issues of the Bulletin is <<http://www.nsf.gov/od/lpa/news/publicat/bulletin/bulletin.htm>>. Subscribers can also sign up for NSF's Custom News Service to find out what funding opportunities are available.

## **ABOUT THE NATIONAL SCIENCE FOUNDATION**

The National Science Foundation (NSF) funds research and education in most fields of science and engineering. Grantees are wholly responsible for conducting their project activities and preparing the results for publication. Thus, the Foundation does not assume responsibility for such findings or their interpretation.

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In accordance with Important Notice No. 120 dated June 27, 1997, Subject: Year 2000 Computer Problem, NSF awardees are reminded of their responsibility to take appropriate actions to ensure that the NSF activity being supported is not adversely affected by the Year 2000 problem. Potentially affected items include: computer systems, databases, and equipment. The National Science Foundation should be notified if an awardee concludes that the Year 2000 will have a significant impact on its ability to carry out an NSF funded activity. Information concerning Year 2000 activities can be found on the NSF web site at <http://www.nsf.gov/oirm/y2k/start.htm>.

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